

REMARKS

Favorable reconsideration is respectfully requested in light of the following discussion.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 15-21, 25, and 26 were rejected under 35 USC 103(a) as being unpatentable over Krinov (GB 887032). The Examiner states that Krinov teaches a method of manufacturing glass comprising mixing a wetting agent with batch materials along with an aqueous alkali metal salt. The Examiner further states that the wetting agent is analogous with a surfactant and that the batch preparation and storage method taught by Krinov is for storing moist batches. The Examiner does admit that Krinov teaches that the moist batch is stored and remains free flowing at a temperature of 90° F (32.2°C) or above and thus does not anticipate the limitation regarding storage below 30°C. However, the Examiner states that the storage temperature taught is very close to the range claimed and that Krinov teaches his preparation and storage method is for creating free flowing batch. Thus, the Examiner concludes one of ordinary skill would have arrived at a storage method using the same compositions through routine experimentation.

Claims 27-34, 38, and 39 were rejected under 35 USC 103(a) as being unpatentable over Krinov. The Examiner states that Krinov teaches a method of manufacturing glass comprising mixing a wetting agent with batch materials

along with an aqueous alkali metal salt. The Examiner states that the wetting agent is analogous with a surfactant and that the batch preparation and storage method taught by Krinov is for storing moist batches. Finally, the Examiner asserts that Krinov, in Examples I and II, teaches that the batches are preheated to 110°C and at these temperatures the batch is free flowing.

Claims 22-24 and 35-37 are rejected under 35 U.S.C 103(a) as being unpatentable over Krinov in view of Barrett (US 3615811) and Anderson (US 6482517). The Examiner admits that Krinov does not teach that the soap is a carboxylate having a chain length of between C4 and C22. However, the Examiner states that Barrett shows that the use of carboxylates as surfactants was known in the art at the time of the invention and that carboxylates were known to be equivalent to sulphonates for this purpose.

1. Applicant's Response to the Rejection of Claims 15-21, 25, and 26

Applicant traverses the Examiner's assertion that through routine experimentation and optimization of the Krinov method one of ordinary skill in the art would have arrived at a storage method using the same compositions and method. Applicant avers that the reference lacks a material limitation of the invention as claimed and in fact teaches away from the claimed invention.

Krinov discloses a process for preparing and storing moist glass-making batch which comprises incorporating surfactant in moist batch (page 3, lines 25-

37 discuss a wetting agent). Krinov teaches how to keep moist batch free flowing, but it does so by controlling the temperature of the glass batch ingredients during mixing and the resultant wet batch during subsequent storage (page 2, lines 24-34). The difference between Krinov and Claim 15 is that when the batch of Krinov is stored at a temperature below 30°C, it sets and hardens (page 2, lines 38-41 and page 3, lines 95-100). Krinov makes it very clear that it does not remain free flowing.

Krinov does teach how to keep a moist batch free flowing, but it does so by controlling the temperature of the glass batch ingredients during mixing and the resultant wet batch during subsequent storage (page 2, lines 24-34). An essential feature of the teaching of Krinov is that the wet batch must be kept at a temperature above 32.2°C (90°F) for it to remain wet and free flowing (Claim 1; page 2, lines 38-41). Thus, a wet batch produced by the process of Krinov will remain free flowing without setting only if it is kept at a temperature above 32.2°C (90°F). If the temperature of the wet batch falls below 32.2°C (90°F), the batch hardens but the hardened batch mixture can "be restored to its wet, homogeneous, free flowing state by heating the solid mass to a temperature above 90°F, preferably above 100°F" if heated from a temperature below 32.2°C (90°F) (page 2, lines 41-48).

Therefore the batch in Krinov cannot be stored at ambient temperature (i.e. at a temperature below 30°C) without it hardening. It would therefore be

desirable to provide a process for preparing moist glass-making batch that is able to be stored at a temperature below 30°C without hardening. Applicant respectfully submits that no such solution can be found in Krinov. However the Applicant has disclosed and claimed a process for preparing moist glass-making batch that is stored at a temperature below 30°C without hardening.

The Examiner has concluded that because both inventions relate to creating free flowing batch and that since the storage temperature taught in Krinov is very close to the range claimed by Applicant, that one of ordinary skill would have arrived at a storage method using the same compositions through routine experimentation. However, as noted in MPEP 2143.03, "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability. See *In re Soli*, 137 USPQ 797 (CCPA 1963).

In Krinov there is no suggestion that the wetting agent plays any part in keeping the batch free flowing at any temperature. Thus, as discussed earlier, we are told in Krinov that below 32.2°C (90°F) wet batch hardens. Additionally, there is no qualification of this teaching to the effect that hardening does not occur if surfactant is added to the wet batch ingredients (page 2, lines 41-48). Therefore, Applicant submits that the invention in claim 15 is not obvious in view of Krinov.

To assert otherwise appears only to be possible with the unacceptable use of hindsight.

Finally, Claims 16 through 26 are dependent on claim 15, so are also submitted to be non-obvious over Krinov.

2. Applicant's Response to the Rejection of Claims 27-34, 38, and 39

With regard to Claim 27, the Applicant respectfully traverses the Examiner's assertion that the reference teaches a process in which a batch heated to temperatures above 100°C would remain free flowing.

Prior to the invention of claim 27, it was not possible for moist batch to be exposed to temperatures above 100°C without hardening occurring (See, for example, US Publication No. 2006/0014620 A1; page 6, lines 21-25). Krinov teaches that the batch should be preheated only within a range of 32.2 - 93.3°C (90 - 200°F) before supply to a glass melting furnace (page 2, lines 48-51). A person having ordinary skill in the art would understand that a 200 °F (or thereabouts) upper temperature limit is required to avoid water being driven off the batch mixture. When the water is driven off, the batch hardens unless the present invention is applied. Thus the batch in Krinov cannot be preheated to or above 100°C without it hardening and being rendered useless.

In light of Krinov, it would therefore be desirable to provide a process for preparing moist glass-making batch that is able to be preheated to a temperature

of at least 100°C before supply to a glass melting furnace. In Krinov, wet batch must be kept below 200°F (93.3°C) for it to remain wet and free flowing (page 2, lines 48-51). Furthermore, no solution for allowing someone to exceed this upper temperature limit can be found in Krinov.

Krinov does provide Examples I and II, as noted by the Examiner. However, contrary to the assertion of the Examiner that Examples I and II of Krinov show preheating to a temperature of 110°C, these examples actually teach only preheating the batch to temperatures of 100°F and 110°F before placement into a furnace (page 3, lines 100-105; page 4, lines 3-7). Also, as stated above, there is no suggestion in Krinov that the wetting agent plays any part in keeping the batch free flowing at any temperature. "Rejections on obviousness grounds cannot be sustained by mere conclusory statements." *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (U.S.2007) (citing *In re Kahn*, 78 USPQ2d 1329 (Fed. Cir. 2006)). Thus, Applicant submits that claim 27 is inventive over Krinov.

Claims 28 - 34, 38, and 39 depend on claim 27. Thus, each is patentable because of its dependency from a patentable base claim.

3. Applicants Response to the Rejection of Claims 22-24 and 35-37

Claims 22 - 24 depend on patentable Claim 15 and Claims 35-37 depend on patentable Claim 27. Thus, each is patentable based at least upon that basis.

Conclusion

In view of the foregoing remarks, favorable reconsideration of the present application and the passing of this case to issue with all claims allowed is respectfully requested.

Should the Examiner wish to discuss any aspect of this application, the applicant's attorney suggests a telephone interview in order to expedite the prosecution of the application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Donald A. Schurr', written over a horizontal line.

Donald A. Schurr, Reg. No.: 34,247

Marshall & Melhorn, LLC
Four SeaGate, Eighth Floor
Toledo, Ohio USA 43604
419.249.7145
419.249.7151 (fax)
schurr@marshall-melhorn.com